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EXAMINER

SHEPARD, JUSTIN E

ART UNIT

PAPER NUMBER

2623

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/04/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/819,126

Applicant(s)

ERRICO, JAMES H.

Examiner

Justin E. Shepard

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11, 13-28, 50-53, 57 and 59-64 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11, 13-28, 50-53, 57 and 59-64 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims **1-11, 13-15, 25-28, 50-53, 57, and 59-64** are rejected under 35 U.S.C. 103 as being anticipated by Graves (US 5,410,344) in view of Herz (US 6,020,883) in further view of Finseth.

Regarding claim **1, 4, 5**, Graves teaches a method for selecting at least one of audio and video comprising (See Abstract): (a) receiving user attribute information corresponding to user preferences wherein said user attribute information includes preferences (See Fig. 4 Step 36 Col. 4 lines 41-51 Col. 6 lines 17-52); (b) receiving program attribute information corresponding to said at least one of said audio and video, where said program attribute information corresponds with said user preferences; and (c) determining the desirability of said at least one of said audio and video based upon said preferences (See Fig. 4 Step 40 Col. 6 lines 17-52), wherein said preferences selectively include data indicative of at least a first, a second, and a third option; (i) said first option including a positive preference indicative of the desirability of said at least one of audio and video; (ii) said second option including a preference indicative of non-

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desirability of said at least one of audio and video; (iii) said third option including a preference indicative of indifference desirability of said at least one of audio and video (From the specification Page 122 lines 5-23, Page 123 lines 1-5 Data indicative of options is a value and the option is determined simply by a numeric range the value falls within. Preferences in Graves' system receive are weighted (See Col. 7 lines 45-66 Col. 8 lines 5-46). Various weights would inherently fall within various numeric ranges (options). Thus, Graves meets the limitations of the claim).

Graves fails to disclose where program attribute weights can take on negative or a neutral (0) value (See Figs. 5 and 6 Col. 8 Eqn. 1). However, using negative or neutral program attribute weights in television program ranking systems is well known in that art as taught by Herz (See Col. 10 lines 31-63 cv is equivalent to Graves' w). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Graves so that user could assign negative values to attribute weights as taught by Herz to allow the user to express a level of aversion to a program attribute (See Herz Col. 10 lines 60-63).

Graves also fails to disclose a method where said user attribute information and said program attribute information includes hierarchical levels, wherein at least one of said user attribute information is at a first level and as least two of said user attribute information is at a second level dependent upon said at least one of said user attribute information at said first level, wherein at least one of said program attribute information is at a first level and as least two of said program attribute information is at a second level dependent upon said at least one of said program attribute information at said first

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level; and wherein at least one of said user attribute information is at a first level and at least two of said user attribute information is at a second level dependent upon said at least one of said user attribute information at said first level, wherein at least one of said program attribute information is at a first level and at least two of said program attribute information is at a second level dependent upon said at least one of said program attribute information at said first level.

Herz discloses a method where said user attribute information includes hierarchical levels, wherein at least one of said user attribute information is at a first level and as least two of said user attribute information is at a second level dependent upon said at least one of said user attribute information at said first level (column 17, lines 52-61); and jointly processing preferences of at least said first level and said second level of said hierarchical levels of said user attribute information (column 27, lines 62-67; column 28, lines 1-5)

At the time of the invention it would have been obvious for one of ordinary skill in the art to use the hierarchical user attribute information taught by Herz in the method disclosed by Graves. The motivation would have been to provide a simple way to filter the suggested programs by making certain attributes more specific and dependent on others.

Graves and Herz fail to disclose a method where said program attribute information includes hierarchical levels, wherein at least one of said program attribute information is at a first level and as least two of said program attribute information is at a

second level dependent upon said at least one of said program attribute information at said first level.

Finseth discloses a method where said program attribute information includes hierarchical levels, wherein at least one of said program attribute information is at a first level and as least two of said program attribute information is at a second level dependent upon said at least one of said program attribute information at said first level (column 12, lines 47-48 and 53-57; figure 4, parts 98A); and jointly processing preferences of at least said first level and said second level of said hierarchical levels of said program attribute information (Note: as the hierarchical program attributes found in figure 4 of Finseth are found in the Content Header Layout found in figure 3 of Graves (fields 1 and 2-20), which are inputs to the neural network (Graves: figure 8; column 8, lines 52-55); it is interpreted as these hierarchical attributes being jointly processed.).

At the time of the invention it would have been obvious for one of ordinary skill in the art to use the hierarchical program attribute information taught by Finseth in the method disclosed by Graves and Herz. The motivation would have been to provide a more intuitive method of filtering the display of programs when provided in the EPG.

Regarding claim 2, Graves teaches wherein said first option is a non-binary preference value (See Fig. 5 Col. 7 Lines 49-54 Weights are based on numbers with values 1-10).

Regarding claim 3, Graves teaches wherein said second option is a non-binary preference value (See Fig. 5 Col. 7 Lines 49-54 Weights are based on numbers with values 1-10).

Regarding claim 6, Graves teaches wherein said preferences are adjustable by a user (See Fig. 5, Fig. 6 and Col. 6 lines 60-68, Col. 7 lines 1-36).

Regarding claim 7, Graves teaches wherein said preferences include at least one default value (See Col. 5 lines 44-50 Default values are inherent to initial loading of personal preference value).

Regarding claim 8, Graves teaches wherein said preferences are adjustable by a user (See Fig. 5, Fig. 6 and Col. 6 lines 60-68, Col. 7 lines 1-36).

Regarding claim 9, Graves teaches wherein said determining results in a value (See Col. 7 lines 45-66 Col. 8 lines 5-46 Programs evaluated by Graves' system receive a grade (value) based on an equation).

Regarding claim 10, Graves teaches a method for selecting at least one of audio and video comprising (See Abstract): (a) receiving user attribute information corresponding to user preferences wherein said user attribute information includes a plurality of preferences (See Fig. 4 Step 36 Col. 4 lines 41-51 Col. 6 lines 17-52); (b)

receiving a first plurality of program attribute information corresponding to said at least one of said audio and video, (c) receiving a second program plurality of attribute information corresponding to said at least one of said audio and video (figure 4, step 34); and (d) determining the desirability of said at least one of said audio and video based upon a relative ranking between said first program attribute information and said second program attribute information (See Col. 6 lines 17-52).

Graves fails to disclose a method where said user attribute information and said program attribute information includes hierarchical levels, wherein at least one of said user attribute information is at a first level and as least two of said user attribute information is at a second level dependent upon said at least one of said user attribute information at said first level, wherein at least one of said program attribute information is at a first level and as least two of said program attribute information is at a second level dependent upon said at least one of said program attribute information at said first level; and wherein at least one of said user attribute information is at a first level and at least two of said user attribute information is at a second level dependent upon said at least one of said user attribute information at said first level, wherein at least one of said program attribute information is at a first level and at least two of said program attribute information is at a second level dependent upon said at least one of said program attribute information at said first level.

Herz discloses a method where said user attribute information includes hierarchical levels, wherein at least one of said user attribute information is at a first level and as least two of said user attribute information is at a second level dependent

upon said at least one of said user attribute information at said first level (column 17, lines 52-61); and jointly processing preferences of at least said first level and said second level of said hierarchical levels of said user attribute information (column 27, lines 62-67; column 28, lines 1-5)

At the time of the invention it would have been obvious for one of ordinary skill in the art to use the hierarchical user attribute information taught by Herz in the method disclosed by Graves. The motivation would have been to provide a simple way to filter the suggested programs by making certain attributes more specific and dependent on others.

Graves and Herz fail to disclose a method where said program attribute information includes hierarchical levels, wherein at least one of said program attribute information is at a first level and as least two of said program attribute information is at a second level dependent upon said at least one of said program attribute information at said first level.

Finseth discloses a method where said program attribute information includes hierarchical levels, wherein at least one of said program attribute information is at a first level and as least two of said program attribute information is at a second level dependent upon said at least one of said program attribute information at said first level (column 12, lines 47-48 and 53-57; figure 4, parts 98A); and jointly processing preferences of at least said first level and said second level of said hierarchical levels of said program attribute information (Note: as the hierarchical program attributes found in figure 4 of Finseth are found in the Content Header Layout found in figure 3 of Graves

(fields 1 and 2-20), which are inputs to the neural network (Graves: figure 8; column 8, lines 52-55); it is interpreted as these hierarchical attributes being jointly processed.).

At the time of the invention it would have been obvious for one of ordinary skill in the art to use the hierarchical program attribute information taught by Finseth in the method disclosed by Graves and Herz. The motivation would have been to provide a more intuitive method of filtering the display of programs when provided in the EPG.

Regarding claim 11, Graves teaches wherein said determining the desirability includes: (a) calculating a first ranking value for said first program attribute information (See Col. 6 lines 17-52, Col. 8 Eqn. 1); (b) calculating a second ranking value for said second program attribute information (See Col. 6 lines 17-52, Col. 8 Eqn. 1); and (c) determining said relative ranking based upon said first ranking value and said second ranking value (See Col. 6 lines 17-52).

Regarding claim 13, Graves teaches wherein said determining the desirability includes and operation where, (a) said first program attribute information includes a first attribute and free from a second attribute (See Fig. 3, Fig. 5, Col. 4 lines 52-67, Col. 5 lines 1-62 Attributes are independent of one another. For example, Story Appeal is rated separately from Actor #1); (b) said second program attribute information includes said first attribute and said second attribute (See Fig. 3, Fig. 5 A second program could contain both attributes i.e. Story appeal and Actor #1); and (c) said determining said relative ranking indicates said second program as more desirable than said first

program (See Col. 6 lines 17-52 Col. 8 Eqn. 1 Based on the weighting and values of each attribute a second program could receive a higher ranking than a first program).

Regarding claim **14**, Graves teaches wherein said determining the desirability includes and operation where, (a) said first program attribute information includes a first attribute and free from a second attribute (See Fig. 3, Fig. 5, Col. 4 lines 52-67, Col. 5 lines 1-62 Attributes are independent of one another. For example, Story Appeal is rated separately from Actor #1); (b) said second program attribute information includes said first attribute and a relatively smaller presence of said second attribute in comparison to said first attribute (See Fig. 3, Fig. 5 A second program could have a smaller value for one attribute versus another i.e. Actor #1 has a smaller value than Story appeal); and (c) said determining said relative ranking indicates said second program as more desirable than said first program (See Col. 6 lines 17-52 Col. 8 Eqn. 1 Based on the weighting and values of each attribute a second program could receive a higher ranking than a first program).

Regarding claim **15**, Graves teaches wherein said determining the desirability includes and operation where, (a) said first program attribute information includes a first attribute and a second attribute, where said second attribute has a first relatively smaller presence than said first attribute in said first program (See Fig. 3, Fig. 5 A program could have a smaller value for one attribute versus another i.e. Actor #1 has a smaller value (weight) than Story appeal); (b) said second program attribute information

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includes said first attribute and said second attribute, where said second attribute has a second relatively smaller presence than said first attribute in said second program, where said first relatively smaller presence is smaller than said second relatively smaller presence (See Fig. 3, Fig. 5 A program could have a smaller value for one attribute versus another i.e. Actor #1 has a smaller value(weight) than Story appeal and a program could have a smaller value for an attribute when compared to that value for that attribute of another program); and (c) said determining said relative ranking indicates said second program as more desirable than said first program (See Col. 6 lines 17-52 Col. 8 Eqn. 1 Based on the weighting and values of each attribute a second program could receive a higher ranking than a first program).

Regarding claim **25**, Graves teaches a method for selecting at least one of audio and video comprising: (a) receiving user attribute information corresponding to user preferences, wherein said user attribute information includes a plurality of preference values (See Abstract Col. 5 lines 44-67, Col. 6 lines 1-16); (b) receiving program attribute information corresponding to said at least one of an audio and a video; and (c) evaluating said user attribute information and said program attribute information by determining: (i) a first score when a portion of said user attribute information matches a portion of said program attribute information and said first score is based at least in part upon one of said preference values (See Col. 8 Eqn 1 A first score is calculated, $i = 1$); (ii) a second score when another portion of said user attribute information matches another portion of said program attribute information and said second score is based at

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least in part upon one of said preference values (See Col. 8 Eqn 1 A second score is calculated, $i = 2$); (iii) a composite score based, at least in part, upon said sorts score and said second score (See Col. 8 Eqn 1 Scores are added).

Graves fails to disclose a method where said user attribute information and said program attribute information includes hierarchical levels, wherein at least one of said user attribute information is at a first level and as least two of said user attribute information is at a second level dependent upon said at least one of said user attribute information at said first level, wherein at least one of said program attribute information is at a first level and as least two of said program attribute information is at a second level dependent upon said at least one of said program attribute information at said first level; and wherein at least one of said user attribute information is at a first level and at least two of said user attribute information is at a second level dependent upon said at least one of said user attribute information at said first level, wherein at least one of said program attribute information is at a first level and at least two of said program attribute information is at a second level dependent upon said at least one of said program attribute information at said first level.

Herz discloses a method where said user attribute information includes hierarchical levels, wherein at least one of said user attribute information is at a first level and as least two of said user attribute information is at a second level dependent upon said at least one of said user attribute information at said first level (column 17, lines 52-61); and jointly processing preferences of at least said first level and said

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second level of said hierarchical levels of said user attribute information (column 27, lines 62-67; column 28, lines 1-5)

At the time of the invention it would have been obvious for one of ordinary skill in the art to use the hierarchical user attribute information taught by Herz in the method disclosed by Graves. The motivation would have been to provide a simple way to filter the suggested programs by making certain attributes more specific and dependent on others.

Graves and Herz fail to disclose a method where said program attribute information includes hierarchical levels, wherein at least one of said program attribute information is at a first level and as least two of said program attribute information is at a second level dependent upon said at least one of said program attribute information at said first level.

Finseth discloses a method where said program attribute information includes hierarchical levels, wherein at least one of said program attribute information is at a first level and as least two of said program attribute information is at a second level dependent upon said at least one of said program attribute information at said first level (column 12, lines 47-48 and 53-57; figure 4, parts 98A); and jointly processing preferences of at least said first level and said second level of said hierarchical levels of said program attribute information (Note: as the hierarchical program attributes found in figure 4 of Finseth are found in the Content Header Layout found in figure 3 of Graves (fields 1 and 2-20), which are inputs to the neural network (Graves: figure 8; column 8, lines 52-55); it is interpreted as these hierarchical attributes being jointly processed.).

At the time of the invention it would have been obvious for one of ordinary skill in the art to use the hierarchical program attribute information taught by Finseth in the method disclosed by Graves and Herz. The motivation would have been to provide a more intuitive method of filtering the display of programs when provided in the EPG.

Regarding claim **26**, Graves teaches wherein said evaluating is free from combining multiple preference values into a single composite preference value (See Col. 8 Eqn 1. Preference values are combined to make a composite score not a single composite preference value).

Regarding claim **27**, Graves teaches wherein a said composite score is determined for a plurality of said videos, and said video are ranked based, at least in part, upon said composite scores. (See Col. 6 lines 17-52).

Regarding claim **28**, Graves teaches wherein said composite score is determined free from comparing said first score and said second score (See Col. 8 Eqn 1 The composite score is the sum of the first score and the second score. Summing is free from comparison).

Regarding claim **50**, Graves teaches a method for selecting at least one of audio and video comprising (See Abstract): (a) receiving user attribute information corresponding to user preferences (See Col. 5 lines 44-68, Col. 6 lines 1-16); (b)

receiving program attribute information corresponding to said at least one of a first audio and first video (See Fig. 4 Step 34 Col. 6 lines 17-52); (c) receiving program attribute information corresponding to said at least one of a second audio and second video (See Fig. 4 Step 34 Col. 6 lines 17-52 This step is done for a plurality of programs); and (d) ranking said at least one of said first audio and first video, and, said at least one of said second audio and second video, in response to receiving said user attribute information and said program attribute information for said at least one of said first audio and first video, and, said at least one of said second audio and second video (See Col. 6 lines 17-52).

Graves fails to disclose where program attribute weights can take on negative values wherein said negative preference results in decreasing said rankings to a lower level than would have resulted had said negative preference not been included. However, using negative program attribute weights in television program ranking systems is well known in that art as taught by Herz (See Col. 10 lines 31-63 cv is equivalent to Graves' w). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Graves so that user could assign negative values to attribute weights as taught by Herz to allow the user to express a level of aversion to a program attribute (See Herz Col. 10 lines 60-63).

Graves also fails to disclose a method where said user attribute information and said program attribute information includes hierarchical levels, wherein at least one of said user attribute information is at a first level and as least two of said user attribute information is at a second level dependent upon said at least one of said user attribute

information at said first level, wherein at least one of said program attribute information is at a first level and as least two of said program attribute information is at a second level dependent upon said at least one of said program attribute information at said first level; and wherein at least one of said user attribute information is at a first level and at least two of said user attribute information is at a second level dependent upon said at least one of said user attribute information at said first level, wherein at least one of said program attribute information is at a first level and at least two of said program attribute information is at a second level dependent upon said at least one of said program attribute information at said first level.

Herz discloses a method where said user attribute information includes hierarchical levels, wherein at least one of said user attribute information is at a first level and as least two of said user attribute information is at a second level dependent upon said at least one of said user attribute information at said first level (column 17, lines 52-61); and jointly processing preferences of at least said first level and said second level of said hierarchical levels of said user attribute information (column 27, lines 62-67; column 28, lines 1-5)

At the time of the invention it would have been obvious for one of ordinary skill in the art to use the hierarchical user attribute information taught by Herz in the method disclosed by Graves. The motivation would have been to provide a simple way to filter the suggested programs by making certain attributes more specific and dependent on others.

Graves and Herz fail to disclose a method where said program attribute information includes hierarchical levels, wherein at least one of said program attribute information is at a first level and as least two of said program attribute information is at a second level dependent upon said at least one of said program attribute information at said first level.

Finseth discloses a method where said program attribute information includes hierarchical levels, wherein at least one of said program attribute information is at a first level and as least two of said program attribute information is at a second level dependent upon said at least one of said program attribute information at said first level (column 12, lines 47-48 and 53-57; figure 4, parts 98A); and jointly processing preferences of at least said first level and said second level of said hierarchical levels of said program attribute information (Note: as the hierarchical program attributes found in figure 4 of Finseth are found in the Content Header Layout found in figure 3 of Graves (fields 1 and 2-20), which are inputs to the neural network (Graves: figure 8; column 8, lines 52-55); it is interpreted as these hierarchical attributes being jointly processed.).

At the time of the invention it would have been obvious for one of ordinary skill in the art to use the hierarchical program attribute information taught by Finseth in the method disclosed by Graves and Herz. The motivation would have been to provide a more intuitive method of filtering the display of programs when provided in the EPG.

Regarding claim **51**, Graves modified with Herz teaches wherein said ranking determines said first video as more desirable for said user than said second video (See Graves Fig. 4 Step 42d Col. 6 lines 17-52).

Regarding claim **52**, Graves modified with Herz teaches wherein said ranking determines said second video as more desirable for another user than said first video (See Graves Fig. 4 Step 42c Col. 6 lines 17-52).

Regarding claim **53**, Graves modified with Herz teaches wherein said ranking is in a relativistic manner (See Col. 6 lines 17-52).

Regarding claim **57**, Graves teaches a method for selecting at least one of audio and video comprising (See Abstract): (a) receiving user attribute information corresponding to user preferences; (b) receiving program attribute information corresponding to said at least one of an audio and video (See Fig. 4 Step 34 Col. 6 lines 17-52); (c) evaluating said user attribute information and said program attribute information by: (i) determining a first value based upon, at least in part, a first a portion of said user attribute information matches a portion of said program attribute information (See Col. 6 lines 17-52 Col. 8 Eqn. 1 programs are evaluated for attributes $i=1$ to n . The value for $i=1$ is the first value), and (ii) determining a second value based upon, at least in part, a second portion of said user attribute information matches a portion of said program attribute information (See Col. 6 lines 17-52 Col. 8 Eqn. 1 programs are

evaluated for attributes $i=1$ to n The value for $i=2$ is the second value); (d) discarding said at least one of said audio and video, in response to receiving said user attribute information and said program attribute information for said at least one of said audio and video, as a desirable said at least one of audio and video for said user based upon if at least one of said first value or said second value indicates non-desirability of said at least one of audio and video (See Col. 6 lines 17-52 The program with the lowest grade is discarded); (e) if said at least one of audio and video is not discarded as a result of step (d) then determining a third value based upon, at least in part, said first value and said second value (See Col. 6 lines 46-49 If two programs share a common grade one program the time the two programs have been stored is compared. The length of time a program is stored is based on the programs grade compared to other programs. The grade is based on the first value and the second value. Thus, the time a program is stored is based upon the first value and second value).

Graves fails to disclose a method where said user attribute information and said program attribute information includes hierarchical levels, wherein at least one of said user attribute information is at a first level and as least two of said user attribute information is at a second level dependent upon said at least one of said user attribute information at said first level, wherein at least one of said program attribute information is at a first level and as least two of said program attribute information is at a second level dependent upon said at least one of said program attribute information at said first level; and wherein at least one of said user attribute information is at a first level and at least two of said user attribute information is at a second level dependent upon said at

least one of said user attribute information at said first level, wherein at least one of said program attribute information is at a first level and at least two of said program attribute information is at a second level dependent upon said at least one of said program attribute information at said first level.

Herz discloses a method where said user attribute information includes hierarchical levels, wherein at least one of said user attribute information is at a first level and as least two of said user attribute information is at a second level dependent upon said at least one of said user attribute information at said first level (column 17, lines 52-61); and jointly processing preferences of at least said first level and said second level of said hierarchical levels of said user attribute information (column 27, lines 62-67; column 28, lines 1-5)

At the time of the invention it would have been obvious for one of ordinary skill in the art to use the hierarchical user attribute information taught by Herz in the method disclosed by Graves. The motivation would have been to provide a simple way to filter the suggested programs by making certain attributes more specific and dependent on others.

Graves and Herz fail to disclose a method where said program attribute information includes hierarchical levels, wherein at least one of said program attribute information is at a first level and as least two of said program attribute information is at a second level dependent upon said at least one of said program attribute information at said first level.

Finseth discloses a method where said program attribute information includes hierarchical levels, wherein at least one of said program attribute information is at a first level and as least two of said program attribute information is at a second level dependent upon said at least one of said program attribute information at said first level (column 12, lines 47-48 and 53-57; figure 4, parts 98A); and jointly processing preferences of at least said first level and said second level of said hierarchical levels of said program attribute information (Note: as the hierarchical program attributes found in figure 4 of Finseth are found in the Content Header Layout found in figure 3 of Graves (fields 1 and 2-20), which are inputs to the neural network (Graves: figure 8; column 8, lines 52-55); it is interpreted as these hierarchical attributes being jointly processed.).

At the time of the invention it would have been obvious for one of ordinary skill in the art to use the hierarchical program attribute information taught by Finseth in the method disclosed by Graves and Herz. The motivation would have been to provide a more intuitive method of filtering the display of programs when provided in the EPG.

Regarding claim 59, Graves teaches wherein said evaluating is based upon a summation operation (See Col. 8 Eqn. 1). From the specification the AND function is an averaging function (Page 131 lines 13-14), the result of Graves summation divided by the number of elements summed (n). The examiner takes Official Notice that averaging to normalize a set of numbers is well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify

Graves so that the result of his summation equation was divided by the number of elements added together to create normalized grades.

Regarding claim 60, Graves teaches a method for selecting at least one of audio and video comprising (See Abstract): (a) receiving user attribute information corresponding to user preferences; (b) receiving program attribute information corresponding to said at least one of an audio and a video (See Fig. 4 Step 34 Col. 6 lines 17-52); and (c) evaluating said at least one of said audio and video, in response to receiving said user attribute information and said program attribute information based upon, (i) a first set of a plurality of preferences wherein said first set is evaluated based upon a first operator (See Col. 8 lines 5-68, Col. 9 lines 1-3); (ii) a second set of a plurality of preferences wherein said second set is evaluated based upon a second operator (See Col. 8 lines 5-68, Col. 9 lines 1-3); (iii) wherein said first set and said second set are evaluated independent of the number of preferences of said first set and said second set (See Col. 8 lines 5-68, Col. 9 lines 1-3 First set and second set are simply partitions of Graves elements 1 to n such partitioning does not effect outcome of Graves' equation. Thus, the limitations of this claim are anticipated by Graves).

Graves fails to disclose a method where said user attribute information and said program attribute information includes hierarchical levels, wherein at least one of said user attribute information is at a first level and as least two of said user attribute information is at a second level dependent upon said at least one of said user attribute information at said first level, wherein at least one of said program attribute information

is at a first level and as least two of said program attribute information is at a second level dependent upon said at least one of said program attribute information at said first level; and wherein at least one of said user attribute information is at a first level and at least two of said user attribute information is at a second level dependent upon said at least one of said user attribute information at said first level, wherein at least one of said program attribute information is at a first level and at least two of said program attribute information is at a second level dependent upon said at least one of said program attribute information at said first level.

Herz discloses a method where said user attribute information includes hierarchical levels, wherein at least one of said user attribute information is at a first level and as least two of said user attribute information is at a second level dependent upon said at least one of said user attribute information at said first level (column 17, lines 52-61); and jointly processing preferences of at least said first level and said second level of said hierarchical levels of said user attribute information (column 27, lines 62-67; column 28, lines 1-5)

At the time of the invention it would have been obvious for one of ordinary skill in the art to use the hierarchical user attribute information taught by Herz in the method disclosed by Graves. The motivation would have been to provide a simple way to filter the suggested programs by making certain attributes more specific and dependent on others.

Graves and Herz fail to disclose a method where said program attribute information includes hierarchical levels, wherein at least one of said program attribute

information is at a first level and as least two of said program attribute information is at a second level dependent upon said at least one of said program attribute information at said first level.

Finseth discloses a method where said program attribute information includes hierarchical levels, wherein at least one of said program attribute information is at a first level and as least two of said program attribute information is at a second level dependent upon said at least one of said program attribute information at said first level (column 12, lines 47-48 and 53-57; figure 4, parts 98A); and jointly processing preferences of at least said first level and said second level of said hierarchical levels of said program attribute information (Note: as the hierarchical program attributes found in figure 4 of Finseth are found in the Content Header Layout found in figure 3 of Graves (fields 1 and 2-20), which are inputs to the neural network (Graves: figure 8; column 8, lines 52-55); it is interpreted as these hierarchical attributes being jointly processed.).

At the time of the invention it would have been obvious for one of ordinary skill in the art to use the hierarchical program attribute information taught by Finseth in the method disclosed by Graves and Herz. The motivation would have been to provide a more intuitive method of filtering the display of programs when provided in the EPG.

Regarding claim 61, Graves teaches wherein at least one of said first operator and said second operator is an "OR" function (See Col. 8 Eqn. 1). From the specification the "OR" function is a summation (Page 135 line 1).

Regarding claim **62**, Graves teaches wherein said first operator and said second operator are "OR" functions (See Col. 8 Eqn. 1).

Regarding claim **63**, Graves teaches wherein said first set and said second set depend from the same preference within said hierarchy (See Col. 8 Eqn. 1). The first set and second set are on the same level of the hierarchy and depend from the overall preference).

Regarding claim **64**, Graves teaches wherein said first set and said second set have a different number of preferences (See Col. 8 Eqn. 1). i values 1 to n could be an odd number divided into two sets).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin E. Shepard whose telephone number is (571) 272-5967. The examiner can normally be reached on 7:30-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Grant can be reached on (571) 272-7294. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JS


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